

Other detritivores

Greenstreet divides marine detritivores in three separate categories (1997). These categories are: bacterial detritivores, meiobenthic detritivores, and macrobenthos detritivores (Greenstreet, 1997). The definition of detritivore is given by Satyam and Thiruchitrabalam and is as follows: “Detritivores (or decomposers) are organisms that break-down and feed on dead and decaying organic material, recycling it back into the ecosystem as energy and nutrients for primary producers to use again.” (2018). Many species fall within the category of detritivore, though some are known to actively hunt for prey as well. Some example species families that (mostly) fall within the group of detritivores are: crustaceans, starfish, bacteria and differing species of suspension feeders. As crustaceans are discussed as a separate group they will not be discussed here.



History/ Population trends

Detritivore was first used academically in a German research paper by Schuster, where he described them as ‘small bottomcrawlers feeding on waste’ (1957). Since then, research papers have often referred to detritivores as benthic organisms (Greenstreet, 1997). Arneberg et al. denotes that there has been no significantly noticeable decline in species populations that fall within the group of detritivores, though they suggest that this might be more pronounced within a few years (2023).

Detritivore vs predator

Because no significant differences were found between species occurrence in the North Sea and Wadden Sea, this study focuses on possible other differences. One such difference is an abundance difference between predatory species and detritivore species (Blanchard et al., 2008). According to Blanchard et al. the slopes for log abundance vs log mass is significantly steeper for predatory species than it is for detritivore communities (2008). This would suggest that detritivore species, in general, are lighter in mass than predatory species.

Factors from the study

No migratory detritivore species were determined as well as detritivore species that used to have a significant role in the food webs of the North Sea and Wadden Sea. However, Reise et al. has determined that more than a hundred new species from overseas have made the Wadden Sea their home (2023). They conclude that the effects are diverse and both negative as well as positive (Reise et al., 2023). Some of these species have either become important for fisheries or were brought to the Wadden Sea with the prospect of it becoming an important fisheries species (Reise et al. 2023).

Diet

- Decaying organic matter (Satyam & Thiruchitrabalam, 2018)
- Seagrass (Blanchard et al., 2008)
- Zooplankton (Blanchard et al., 2008)
- Phytoplankton (Blanchard et al., 2008)

Sources

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